Decided February 26, 1988

Appeals from decisions of the Montrose, Colorado, District Manager, Bureau of Land Management, holding that oil and gas leases C-17453 and C-17456 had expired.

Affirmed.

1. Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

An oil and gas lease on which there exists a well capable of production in paying quantities on the expiration date of the lease will not expire for lack of production unless the lessee is allowed a reasonable time (at least 60 days) after notice in which to place the well in a producing status.

2. Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

In order to establish a well capable of producing oil or gas in paying quantities which will extend the term of an oil and gas lease beyond the expiration date, the record must show the existence of a well which is actually in a condition to produce at the time in question. A decision holding a lease to have expired will be affirmed where it is clear from a flow test conducted on the lease expiration date that the well is not capable of production in the absence of reworking operations.

 Oil and Gas Leases: Extensions--Oil and Gas Leases: Termination--Oil and Gas Leases: Well Capable of Production

In determining the existence of a well capable of production in paying quantities as of the lease

expiration date the present status of the well is properly distinguished from potential for production. The results of a flow test conducted on the expiration date of the lease will ordinarily be dispositive of the issue. Results obtained in reworking operations conducted after the lease expiration date are not relevant to the status of the well at the critical date.

APPEARANCES: David E. Brody, Esq., Denver, Colorado, for appellant, Amoco Production Company; Lowell Madsen, Esq., U.S. Department of the Interior, Office of the Regional Solicitor, Denver, Colorado, for Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE GRANT

Amoco Production Company (Amoco) 1/ appeals from letter decisions of the Montrose District Office, Bureau of Land Management (BLM), dated August 9 and September 11, 1985, respectively, holding that oil and gas leases C-17453 and C-17456 had expired at the end of their 2-year extended terms on June 30, 1985. 2/ The decisions held that the wells on the respective leases, the No. 32A-l (on lease C-17453) and the No. 10UA-l (on lease C-17456), were not capable of production in paying quantities, and that these leases had therefore expired at the end of their terms. The decisions also directed that detailed plans for abandonment and salvage operations on the leased lands be submitted.

Oil and gas leases C-17453 and C-17456 were each issued with an effect tive date of July 1, 1973, for a term of 10 years. Both leases received 2-year extensions to June 30, 1985, as a result of diligent drilling oper- ations being conducted over the expiration date of the leases on June 30, 1983. 30 U.S.C. | 226(e)(1982); 43 CFR 3107.1.

In its statement of reasons for appeal, Amoco asserts that wells 32A-1 and 10UA-1 were each capable of production in paying quantities on June 30, 1985. Appellant contends:

The 32A-1 and 10UA-1 wells were capable of production on June 30, 1985, thereby extending Lease Nos. C-17453 and C-17456 into their secondary terms. As a result, Perlman was entitled and Amoco is now entitled to an order of the BLM requiring it to place

 $[\]underline{1}$ / On Nov. 13, 1985, Amoco purchased from William Perlman and Sun Explor- ation and Production Company all their right, title, and interest in the leases involved in this appeal and the wells thereon. By order dated

Feb. 21, 1986, the Board granted a request by Amoco for substitution as the party appellant in this case. The Board expresses no opinion whether this sequence implicates the anti-assignment statute, 31 U.S.C. | 3727 (1982). See Naartex Consulting Corp. v. Watt, 722 F.2d 779, 793-95 (D.C. Cir. 1983).

^{2/} By order of the Board dated Oct. 31, 1985, the subject appeals were consolidated for review.

the wells in producing status and a minimum of 60 days in which to accomplish this before the leases could be argued to have terminated.

Alternatively, on June 30, 1985, the 32A-1 and 10UA-1 wells produced gas, thereby extending Lease Nos. C-17453 and C-17456 into their secondary terms. When the wells bridged off and gas production ceased, Perlman was entitled and Amoco is now entitled to 60 days in which to commence reworking the wells, and the leases could not be argued to have terminated so long as rework- ing operations are continuing in a diligent manner.

Because the 32A-1 and 10UA-1 wells were capable of production prior to the leases' expiration date, or because the wells actu- ally produced gas on the last day of the leases' primary terms, Perlman was entitled to 60 days' minimum notice from the BLM to place his wells in producing status or 60 days after production ceased within which to start to rework the wells. Thus, Amoco, as assignee and successor in interest to the leases, is now entitled to such notice and opportunity to rework the wells. Only if the lessee failed to start reworking the wells within 60 days of ces- sation of production and to continue such operations diligently, or failed to comply with an order to place the wells in producing status could the leases be said to have terminated.

(Statement of Reasons at 10-11). In support of its contentions, appellant has submitted the affidavit of Rene Samaniego, the foreman for appellant's predecessor in interest, Perlman, on the subject of the status of the leases and wells. The affidavit states in part:

- 4. In the afternoon of June 30, 1985, I was present at the wellsites of the 32A-1 and 10UA-1 wells with representatives of the San Juan Resource Area of the BLM (the "BLM representatives"), and I observed the following
 - (a) At the 32A-1 Well, I observed pressure on the well gauge. Next, I opened the well and observed actual production of gas from that well. The BLM representatives acknowledged at that time they also observed actual production of gas from the 32A-1 Well. The 32A-1 Well flowed gas for approximately 30 minutes and then "bridged off" -- that is, the well tubing clogged with remnants of the sand which had been used to fracture the coal seam in which the well was completed. At this point, I observed the pressure on the well gauge drop to zero, and observed no further gas production from the 32A-1 Well. The BLM representatives then told me that Perlman would lose Lease No. C-17453 unless the 32A-1 Well was producing gas at midnight of that night. Since that day (June 30, 1985) was a Sunday, Perlman was unable to get a crew to workover the well in order to

clear away the sand so that the 32A-1 Well would be flowing gas at midnight of that night.

(b) At the 10UA-1 Well, I also observed pressure on the well gauge and actual production of gas from the well. At that time, the 10UA-1 Well flowed gas for approximately 45 minutes during a production test. The BLM representatives monitored this test using a portable gas meter supplied by Perlman, and reported to me that the well flowed approximately 10 MCF in 30 minutes. At the end of this 45 minute period, the 10UA-1 Well also "bridged off." The BLM representatives told me that the 10 MCF of gas produced by the well was sufficient to hold Lease No. C-17456 and the 10UA-1 Well did not have to be producing gas at midnight of that night.

(Samaniego Affidavit at 1-2). Further, appellant argues that it is entitled to the opportunity to provide BLM with information regarding the status and capabilities of the wells, regardless of whether the information is obtained from tests or analysis which took place after the expiration date on June 30, 1985.

Amoco has also submitted the affidavit of Randy L. Rickford, a senior petroleum engineer, employed by appellant. His affidavit states in part:

- b. The 32A-1 Well and 10UA-1 Well will produce gas in paying quantities if the Bureau of Land Management would allow Amoco to enter upon the leases and operate the wells, including appropriate reworking and/or stimulation.
- c. The Frahm 15-1 Well is an Amoco well with which I am familiar and which is located in the same field as the 10UA-1 Well. In the June 30, 1985, test, the 10UA-1 Well performed in a manner substantially similar to the original performance of the Frahm 15-1 Well, which logged off in its initial flow test, before the Frahm 15-1 Well was stimulated. Since the two wells behaved similarly in flow tests, and because they have numerous other similarities, it is my opinion that the 10UA-1 Well would exhibit production characteristics similar to the Frahm 15-1 Well after it is stimulated.

* * * * * *

- e. Assuming that the 10UA-1 Well would produce gas and water after fracturing, just as the Frahm 15-1 Well did, the 10UA-1 Well would be capable of producing gas in paying quantities. * * *
- f. Reservoir engineering data for the 32A-1 Well indicates that the well produced gas at an initial production rate of 118 MCF/D in a flow test conducted on June 30, 1985, before the well bridged off. Reports indicate that William Perlman had this well cleaned of debris and flow tested again in July, 1985.

- g. The report of the flow test made on July 22, 1985, shows that the 32A-1 Well produced an average of 21 MCF/D of gas while it maintained a constant wellhead pressure. Considering that Amoco's base rate of production for this field is 7.7 MCF/D of gas, the 32A-1 Well paid its costs during the July 22 flow test, and was, therefore, producing gas in paying quantities.
- h. Based on the engineering data for the June 30 and July 22 flow tests of the 32A-1 Well, the well would have continued to produce gas in paying quantities if the well had not bridged off.

(Rickford Affidavit at 1-2).

In answer to appellant's brief, counsel for BLM asserts that it is clear from the record that there was no well capable of producing oil or gas in paying quantities on either lease at any time prior to the expiration date of the extended lease terms. The answer of BLM vigorously disputes appellant's contention that evidence obtained during drilling activities conducted after the expiration date of the leases may be con-sidered with respect to the issue of whether there was a well capable of production in paying quantities on the expiration date.

In further response to appellant's statement of reasons, BLM has submitted the affidavits of two of its employees, Terry M. Galloway and Dennis J. Carpenter. With respect to lease C-17453, Galloway states:

- 1. I am employed in the Montrose District of the Bureau of Land Management. I have been a Petroleum Engineering Technician in the Federal Government since 1977 with U.S. Geological Survey and the Minerals Management Service, and with the Bureau of Land Management since 1983.
- 2. A part of my job is to inspect drilling and production operations and witness well tests.
- 3. On June 30, 1985, I witnessed the test being conducted by Tefteller, Inc., on well no. 32A-1, Township 34N., Range 4W., NMPM on Federal Lease C-17453. The test was being conducted to deter- mine if the well was able to produce in paying quantities. Also present at the inspection were Dennis Carpenter and Jack Kaiser with BLM, Rene Samaniego and William Perlman, and Neil Tefteller with Tefteller, Inc.
- 4. Tefteller's gauge and dead weight tester read 1200 psi prior to opening up the well. The well was opened and flowed through a 3/32" orifice until the pressure dropped to zero, which was about 25 minutes. The well was shut in for over an hour. The bomb was pulled and it showed zero pressure and no build up.

With respect to the wells on both leases, Carpenter states in his affidavit:

1. I am employed by the Department of Interior, Bureau of Land Management as a Petroleum Engineer, for the San Juan Resource Area located in Durango, Colorado.

* * * * * * *

- 5. At the inspection of the 10UA-1 on June 30, 1985, the test that I witnessed did not prove that the well was physically capable of production in paying quantities. When we arrived on the location we witnessed gas actually being produced at a rate equivalent to approximately 55 Mcf/day (55,000 cubic feet per day). At this time, I told Rene that a stabilized rate of 10 Mcf/day (10,000 cubic feet per day) would be considered production in paying quantities. After approximately two hours the flow rate had tapered off to 0. This can be related to a volume of about 2 Mcf (2,000 cubic feet) being produced over a two hour period.
- 6. At my inspection of Well No. 32A-1 on June 30, 1985, the test that I witnessed did not prove that the well was physically capable of production. The well had approximately 1200 pounds of pressure on it when we arrived. 1200 pounds is about 850 pounds more than I would expect on a well of this depth. My professional interpretation of the unusually high wellhead pressure noted during the test is that some artificial completion pressure was left on the well after the completion of the well. * * * The well was opened with a 3/32" choke on it. The well blew for approximately 25 minutes, then died. No pressure built back up after shutting-in the well for more than an hour. There was a workover-rig standing over the hole during the tests.
- 7. As I left the location after the tests had been run, I told Rene that these leases would expire unless he could establish production in paying quantities prior to midnight. I also stated that Rene was not to do anything to these wells after midnight without approval from our office.
- [1] Noncompetitive oil and gas leases are issued for a primary term of 10 years and so long thereafter as oil or gas is produced in paying quanti- ties. $30 \text{ U.S.C.} \mid 226(e) \text{ (1982)}$. The leases in this case were extended

for an additional 2-year term through June 30, 1985, by reason of the fact drilling operations were conducted on the two leases at the end of the primary terms. 30 U.S.C. | 226(e) (1982); 43 CFR 3107.1. It is further provided by statute that:

No lease issued under this section covering lands on which there is a well capable of producing oil or gas in paying quan-tities shall expire because the lessee fails to produce the same unless the lessee is allowed a reasonable time, which shall be not

less than sixty days after notice by registered or certified mail, within which to place such well in producing status * * *.

30 U.S.C. | 226(f) (1982); see 43 CFR 3107.2-3.

It is appellant's position that wells capable of producing oil or gas in paying quantities within the meaning of the regulations and statute existed on both leases as of June 30, 1985. Appellant states the casing

was set on the wells in 1983 and was perforated prior to June 30, 1985. Appellant argues the fact the wells which produced gas during the well

test on the last day of the lease term ceased production because of "minor mechanical problems" does not establish they are incapable of production

in paying quantities. Hence, appellant contends it was error to hold the leases expired in the absence of 60-days notice to place the wells in a producing status.

Although it is clear from the record that the wells at issue did not produce in paying quantities prior to the expiration date of the leases,

the question of whether these wells were "capable" of production in paying quantities presents a more difficult issue.

[2] The phrase "well capable of producing" means a "well which is actually in a condition to produce at the particular time in question." United Manufacturing Co., 65 I.D. 206 (1958). In the absence of perfor-

ation of the well casing, a well has been held to be physically incapable

of production and, hence, not capable of production in paying quantities. Arlyne Lansdale, 16 IBLA 42 (1974): United Manufacturing Co., supra. A

well has been held not capable of production in paying quantities where substantial pumping of water from the well is required before oil could

be produced in paying quantities. The Polumbus Corp., 22 IBLA 270 (1975). Further, a well has been held not capable of production in paying quanti-

ties where sandfracing 3/ operations were unsuccessful and the record indicated further efforts were needed to restore production, including hot oil treatment and swabbing the well. 4/ Steelco Drilling Corp., 64 I.D. 214 (1957).

In the case of American Resources Management Corp., 40 IBLA 195 (1979), this Board had occasion to carefully consider the concept of a well capable of production in paying quantities. After examining the legislative history of 30 U.S.C. | 226(f), we concluded that: "The emphasis on production being suspended suggests a well where there has been production or where production can clearly be obtained but is not because there is a 'lack of pipe-

lines, roads, or markets for the oil and gas." 40 IBLA at 201. Further,

^{3/ &}quot;An operation designed to loosen or break up tight formations which contain oil or gas, thus causing such formations to have more permeability and greater production." H. Williams and C. Meyers, Manual of Oil and Gas Terms (5th ed. 1981) at 675 (definition of "sandfracing").

^{4/ &}quot;Swabbing a well" has been defined as the "[i]ntroduction of a swab into the tubing after casing is set. perforated and tubing run, in order to clean out drilling mud." H. Williams and C. Meyers, supra at 746.

the Board held that while perforation of the casing and fracturing of the strata may be a prerequisite to establishing the presence of a well capable of production in paying quantities, it does not follow from those proce-

dures that the well is necessarily capable. 40 IBLA at 202. Finally, the Board failed to find a well capable of production in paying quantities where appellant was unable to run a single successful flow test as of the date of termination. 40 IBLA at 202.

Evaluating the No. 32A-1 and No. 10UA-1 wells at issue on these leases in view of this standard, it is clear that neither of the leases had a well capable of production in paying quantities as of the expiration of the lease terms at midnight on June 30, 1985. The wells flowed for only a brief interval (45 minutes and 2 hours, respectively) on the last day of the lease terms when the tubing in the wells clogged and the wells became physically incapable of production. The affidavit of Amoco's petroleum engineer indicates the wells will produce in paying quantities <u>if</u> appellant is allowed to undertake "appropriate reworking and/or stimulation." How-

ever, the issue is whether the wells were capable of production in paying quantities on the expiration date of the leases--a standard which clearly was not met in view of the flow tests on the last day of the lease terms.

[3] Amoco's contention that operations conducted and results obtained after the expiration date of the leases may be used to determine the presence of a well capable of production in paying quantities as of the expiration date is without legal merit. We find the cases cited by appellant in support of this contention to be distinguishable. This Board has held on several occasions that future expectations concerning a well and present assessments regarding potential for production from the well based on inferences drawn from present data must be distinguished from the issue of the present status of the well. John Swanson, 51 IBLA 239, 242 (1980); Universal Resources Corp., 31 IBLA 61, 68 (1977); The Polumbus Corp., 22 IBLA at 272-273. In John Swanson, supra, cited by appellant, the Geological Survey determined that the well in question was completed as

a producing well prior to the expiration date of the lease thus extending the lease by production. The Board set aside a BLM finding that the lease had terminated several months thereafter because the well was no longer capable of production in paying quantities and reworking operations were not commenced within 60 days thereafter. In this context the Board allowed submission of data compiled after the lease was extended by production to determine whether a well capable of production in paying quantities contin- ued to exist at the time when BLM found that such a well ceased to exist. The status of the well at the time of the lease expiration date was assumed and was not at issue in that case. See John Swanson, 66 IBLA 200, 202 (1982).

Similarly, in <u>Universal Resources Corp.</u>, <u>supra</u>, the issue was the productive status of a well on a lease which had previously been extended by reason of production. The case of <u>Impel Energy Corp.</u>, 71 IBLA 237 (1983), also involved an issue of the productive status of a well on a lease which had previously been extended by production. Such cases are distinguishable as they relate to the relevance of data regarding the productive status of

the well obtained after the fixed term of the lease has expired and the lease has been extended by a well capable of production in paying quantities.

In the case of <u>Hancock Enterprises</u>, 74 IBLA 292 (1983), the issue was the productive status of a lease well as of the expiration date of the lease. The Board remanded the case for consideration of evidence which appellant submitted regarding the status of the lease well prior to the expiration date consisting of results of tests run prior to the expiration date. 74 IBLA at 293. This case offers no precedent for consideration of results of well tests or operations conducted after the expiration date of the lease. It is true that in <u>American Resources Management Corp.</u>, <u>supra</u>, the Board did consider the results of a well test which appellant was allowed to conduct 18 days after the lease expiration date where appellant was not allowed to conduct a test of the well status prior to the lease expiration date, noting that "a test demonstrating the capability of the well <u>as of</u> the termination date was essential." 40 IBLA at 202 (emphasis added). This reasoning will not support acceptance of results obtained through drilling operations conducted after the expiration date of the lease where it is clear from the flow test conducted on the expiration date there was no well capable of production in paying quantities at that time.

Accordingly, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decisions appealed from are affirmed.

	C. Randall Grant, Jr.
	Administrative Judge
	114111111111111111111111111111111111111
We concur:	
we concur.	
James L. Burski	
Administrative Judge	
Bruce R. Harris	
Administrative Judge	